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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,756	12/03/2003	John A. Helgenberg	TN325	7618

7590 11/18/2005

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EXAMINER

CHANG, YEAN HSI

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 11/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary**Application No.**

10/727,756

Applicant(s)

HELGENBERG ET AL.

Examiner

Yean-Hsi Chang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1-2 and 4 are objected to because of the following informalities: The “said cell” in claims 1 and 22, the “said fasteners” in claim 4, the “said (the) openings” in claims 11 and 22, and “said gap cover fasteners” in claim 18 lack antecedent bases; the second “a computer module” should not use “a” as article if the same computer component is referred; and the “said cell” in claim 2 is ambiguous as to which cell of the two cells in claim 1 it refers to.. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The statement in claim 1, “a cell cover substantially covering at least one other of said openings adjacent a cell not occupied by a computer module” needs an explanation of its meaning.

The following rejections are based on the Examiner's best understanding of the claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Barringer et al. (US 6,785,133 B2).

Barringer teaches a computer system (fig. 1) comprising: a frame (50, fig. 2) defining a plurality of cells (divided by 64 in fig. 2, not labeled), each of said cells being configured to receive a computer module (54) through a respective opening (shown in figs. 2 and 3, not labeled) adjacent said cell, the computer module configured for insertion into a respective one of said cells through a respective one of said openings (see fig. 2), and a cell cover (72) substantially covering at least one of said openings adjacent a cell (see fig. 3) not occupied by a computer module (claim 1); wherein said computer module is oriented in said cell such that cooling gas may be drawn into said cell through said respective opening for cooling said computer module (see col. 5, lines

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55-60) (claim 2); and wherein said cell cover limits cooling gas used to cool a portion of the computer system from being recirculated into any of said plurality of cells (see col. 5, lines 41-43) (claim 3).

6. Claims 1 and 4-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Jelinger (US 5,768,097).

Jelinger teaches a computer system (fig. 1) comprising: a frame (112, fig. 2) defining a plurality of cells (cells for 217 and 218 in fig. 2, not labeled), each of said cells being configured to receive a computer module (217 or 218) through a respective opening (shown in fig. 2, not labeled) adjacent said cell, the computer module being configured for insertion into a respective one of said cells through a respective one of said openings (see fig. 2), and a cell cover (for example, 117, fig. 1) substantially covering at least one of said openings adjacent a cell (see fig. 1) not occupied by a computer module (claim 1); wherein said cell cover includes at least one fastener (711, fig. 7), each of said fasteners configured for engagement with a respective hole (712) defined by a portion of said computer system (claim 4); wherein said at least one fastener is a spring-loaded retention pin (snapped fit feature may be spring loaded, see col. 7, lines 51-55) including an end portion (end of 117 shown in fig. 7) configured for engagement with the respective hole defined by the portion of said computer system (fig. 7) (claim 5); a gap cover (812, fig. 8) substantially covering a gap (see fig. 8) defined between said computer module and at least one of a plurality of support members included in said frame (claim 6); wherein said gap cover includes at least one

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gap cover fastener (611, fig. 6), each of said gap cover fasteners configured for engagement with a respective gap cover hole (next to 612, fig. 6) designed by another portion of said computer system (see fig. 6, and col. 8, lines 17-23) (claim 7); wherein said at least one gap cover fastener is a spring-loaded retention pin (snapped fit feature may be spring loaded) including an end portion configured for engagement with the respective gap cover hole (see fig. 6) (claim 8); and wherein said gap cover includes a flanged portion covering at least one mounting hole (144, fig. 1; also see col. 7, lines 7-9) defined by said frame, said at least one mounting hole not being used for mounting (claim 9).

7. Claims 11-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Barringer et al.

Barringer teaches a computer system (fig. 1) comprising: a frame (50, fig. 2) including a plurality of support members (shown in fig. 2, not labeled), said support members at least partially defining a plurality of cells (between the frame and 64s, fig. 2) in said frame, each of said cells being configured to receive a respective computer module (54) through a respective opening (shown in fig. 2, not labeled) adjacent said cell, said computer module configured for insertion into one of said cells through a respective one of said openings (shown in fig. 2), wherein a gap (the rightmost cell in fig. 3) is defined between said computer module and at least one of said support members (as shown) and a gap cover (72) substantially covering said gap (claim 11); wherein said computer module is oriented in said cell such that cooling gas may be

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drawn into said cell through said respective opening for cooling said computer module (see fig. 9) (claim 12); wherein said gap cover is positioned over said gap such that cooling gas used to cool a portion of the computer system is limited from being recirculated into any of said plurality of cells (see col. 5, lines 41-43) (claim 13); a cell cover (72 may also be considered as a cell cover) substantially covering at least one of said openings adjacent a cell not occupied by a computer module (shown in fig. 3) (claim 14); and wherein said cell cover limits cooling gas used to cool a portion of said computer system from being recirculated into any of said plurality of cells (see col. 5, lines 41-43) (claim 15).

8. Claims 11, 14 and 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Jelinger.

Jelinger teaches a computer system (fig. 1) comprising: a frame (112, fig. 2) including a plurality of support members (shown in fig. 2, not labeled), said support members at least partially defining a plurality of cells (fig. 2) in said frame, each of said cells being configured to receive a respective computer module (for example, 217) through a respective opening (shown in fig. 2, not labeled) adjacent said cell, said computer module configured for insertion into one of said cells through a respective one of said openings (shown in fig. 2), wherein a gap (the leftmost portion covered by 812 in fig. 8) is defined between said computer module and at least one of said support members (left frame member as shown in fig. 8) and a gap cover (812) substantially covering said gap (claim 11); a cell cover (117, fig. 8) substantially covering at least one

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of said openings adjacent a cell not occupied by a computer module (shown in fig. 8) (claim 14); wherein said cell cover includes at least one fastener (711, fig. 7), each of said fasteners being configured for engagement with a respective hole (712) defined by a portion of said computer system (claim 16); wherein said at least one fastener is a spring-loaded retention pin (snapped fit feature may be spring loaded, see col.7, lines 51-55) including an end portion configured for engagement with the respective hole defined by the portion of said computer system (fig. 7) (claim 17); wherein said gap cover includes at least one gap cover fastener (611, fig. 6), each of said gap cover fasteners being configured for engagement with a respective gap cover hole (next to 612, fig. 6) defined by a portion of said computer system (see fig. 6, and col. 8, lines 17-23) (claim 18); wherein said at least one gap cover fastener is a spring-loaded retention pin (snapped fit feature may be spring loaded) including an end portion configured for engagement with the respective gap cover hole (shown in fig. 6) (claim 19); and wherein said gap cover includes a flanged portion covering at least one mounting hole (144, fig. 1; also see col. 7, lines 7-9) defined by said frame (claim 20).

9. Claims 1, 10-11 and 21-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Garnett et al. (US 6,829,141 B2).

Garnett teaches a computer system (31, fig. 2) comprising: a frame (53, fig. 2) defining a plurality of cells (next to 45 in fig. 2, not labeled), each of said cells being configured to receive a computer module (43) through a respective opening (45) adjacent said cell, the computer module configured for insertion into a respective one of

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said cells through a respective one of said openings (see fig. 2), and a cell cover (or a gap cover 44) substantially covering at least one of said openings adjacent a cell (see fig. 3, and col. 6, lines 46-49, a cell on the side may be considered as a gap as defined in claim 11) not occupied by a computer module (claims 1 and 11); wherein said computer system is a computer server system and said computer module is a modular computer server (see col. 5, lines 24-30) (claims 10 and 21); and a method of preventing recirculation of cooling air in a computer system being disclosed in the specification (claims 22-26).

Correspondence

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Thursday.


If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system,

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see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang
Primary Examiner
Art Unit: 2835
November 16, 2005



YEAN-HSI CHANG
PRIMARY EXAMINER